

WHAT IS CLAIMED IS:

1. A navigation system comprising:

position detector for detecting the current position of
a mobile unit,

5 map information acquisition section for acquiring map
information,

traffic restriction information acquisition section for
acquiring traffic restriction information,

time information acquisition section for acquiring
10 current date, day of week, and time information,

input section for entering a route point,

route searching section for searching for an optimum route
passing through the route point from the current position at
the current date, day of week, and time based on the map
15 information and the traffic restriction information, and

output section for guiding a user through the found route
by display or voice, wherein

said route searching section includes;

area determination section for determining whether an
20 area of the current position is an urban area or a suburban
area,

setting section for setting a predetermined area or a
predetermined time responsive to the determination result, and

restriction presence or absence determination section
25 for determining the presence or absence of restriction on each

time restriction road depending on whether or not a time
restriction road exists in the predetermined area centering
around the current position and whether or not a restriction
time period of the time restriction road overlaps a time period
5 in the predetermined time from the current time, and

if the restriction presence or absence determination
section determines the presence of restriction, said route
searching section searches for a route avoiding the time
restriction road.

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2. The navigation system as claimed in claim 1 wherein
if the area of the current position is an urban area,
said setting section sets the predetermined area to a narrow
area or the predetermined time to a long time.

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3. The navigation system as claimed in claim 1 wherein
if the area of the current position is a suburban area,
said setting section sets the predetermined area to a wide area
or the predetermined time to a short time.

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4. The navigation system as claimed in claim 1, wherein
the map information is provided with attribute
information indicating urban/suburban area, and

said area determination section determines whether the
25 area of the current position is an urban area or a suburban

area based on the attribute information.

5. The navigation system as claimed in claim 1, wherein
said input section enables the user to enter attribute
5 information indicating urban/suburban area, and

said area determination section determines whether the
area of the current position is an urban area or a suburban
area based on the attribute information entered by the user.

10 6. The navigation system as claimed in claim 1, wherein
whenever the mobile unit moves out of the predetermined
area previously set or whenever the predetermined time
previously set elapses, said restriction presence or absence
determination section determines the presence or absence of
15 restriction on the time restriction road.

7. A navigation system comprising:

map information acquisition section for acquiring map
information,

20 traffic restriction information acquisition section for
acquiring traffic restriction information,

time information acquisition section for acquiring
current date, day of week, and time information, and

output section for providing a user with the map
25 information or the traffic restriction information by display

or voice,

restriction time determination section, if a time
restriction road exists in a guide area, for determining a
difference between a restriction time period of the time
5 restriction road and the current time, and

output mode selector for selecting an output mode of the
time restriction road varying depending on the determination
result, wherein

said output section guides the user through the time
10 restriction road according to the selected output mode.

8. The navigation system as claimed in claim 7, wherein
said output mode selector selects an output mode of the
time restriction road varying depending on the case where the
15 current time is contained in a restriction time period of the
time restriction road in the guide area, the case where the
time from the current time to the restriction start time of
the time restriction road is within a predetermined time, or
the case where the time from the current time to the restriction
20 start time of the time restriction road is longer than the
predetermined time.

9. A route searching method comprising:
a position detection step of detecting the current
25 position of a mobile unit,

a map information acquisition step of acquiring map information,

a traffic restriction information acquisition step of acquiring traffic restriction information, a time information acquisition step of acquiring current date, day of week, and time information,

an input step of entering a route point,

a route searching step of searching for an optimum route passing through the route point from the current position at the current date, day of week, and time based on the map information and the traffic restriction information, and

an output step of guiding a user through the found route by display or voice, wherein

the route searching step includes;

an area determination step of determining whether an area of the current position is an urban area or a suburban area,

a setting step of setting a predetermined area or a predetermined time responsive to the determination result, and

a restriction presence or absence determination step of determining the presence or absence of restriction on each time restriction road depending on whether or not a time restriction road exists in the predetermined area centering around the current position and whether or not a restriction time period of the time restriction road overlaps a time period in the predetermined time from the current time, and

if the restriction presence or absence determination step determines the presence of restriction, the route searching step searches for a route avoiding the time restriction road.

5 10. A map information guide method comprising:

a map information acquisition step of acquiring map information,

a traffic restriction information acquisition step of acquiring traffic restriction information,

10 a time information acquisition step of acquiring current date, day of week, and time information,

an output step of providing a user with the map information or the traffic restriction information by display or voice,

a restriction time determination step, if a time
15 restriction road exists in a guide area, of determining a difference between a restriction time period of the time restriction road and the current time, and

an output mode selection step of selecting an output mode of the time restriction road varying depending on the
20 determination result, wherein

the output step guides the user through the time restriction road according to the selected output mode.